

Amendments to the Specification

Please replace the paragraph on Page 10, lines 4 - 8 with the following marked-up replacement paragraph:

-- HiperSockets is referred to equivalently herein as “iQDIO”, or “Internal Queued Direct Input/Output”. The HiperSockets technology is described in commonly-assigned U. S. Patent _____ (serial Patent application number 09/677,454, filed 10/02/2000 (now U. S. Patent 6,854,021), entitled “Communications Between Partitions Within a Logically Partitioned Computer”, which is hereby incorporated herein by reference. --

Please replace the paragraph on Page 17, lines 5 - 14 with the following marked-up replacement paragraph:

-- On the first pass through Block 620, the first data packet from the SBAL is located and processed. Block 635 compares the destination address from this data packet to the entries in the mini-routing table. If a match is found (that is, the mini-routing table has an entry mapping the DLC-in on which the packet was received to the DLC-out specified by the packet’s destination address), an indicator associated with the packet is preferably [[sent]] set to convey that fast path routing is in use for this packet. Control then transfers to Block 640, which is discussed below. Otherwise, when there is no match (i.e. the test in Block 635 has a negative result), control transfers to Block 630 which sends the packet to the IF layer and IP layer components (see elements 475 and 470 of Fig. 4) for creating the outbound routing information using prior art techniques. --

Please replace the paragraph that begins on Page 18, line 17 and carries over to Page 19, line 15 with the following marked-up replacement paragraph:

-- Returning to the discussion of Block 640, which is reached after determining that fast path routing is to be performed according to the present invention, Block 640 preferably performs checks related to packet copying. When preparing a packet for transmission, there may be several cases in which it is necessary to create a copy of the packet; in other cases, the packet can be transmitted without making a copy. As a first example of when creating a copy may be necessary, an implementation of the present invention might support a DLC for which the DLC-out type has a larger packet header length than the DLC-in type. In this first case, it is necessary to copy the inbound packet to separate storage to accommodate the larger packet header length of the outbound packet. (As will be obvious, the processing of Block 640 is preferably adapted to determining packet lengths. ~~As lengths.~~) As a second example of when creating a copy may be necessary (or at least desirable), it may happen that some of the packets within a storage frame are going to different DLC-out types. In addition, some of the packets from the frame may need to be sent to the IP layer for routing as in the prior art (i.e. if fast path routing is not supported with their DLC). In order that the storage frame is not released before its “mixture” of packets is completely processed, it is preferable in this second case to copy the packets to separate storage areas. It may also be desirable to copy packets for which the exiting DLC (i.e. the DLC-out) uses a “real” adapter to transfer data to an external network. An example is illustrated by element 450 of Fig. 4, which represents a QDIO Network Interface Card (NIC). --